

Application No.: 10/615,098  
Response to Office Action of September 21, 2007  
Attorney Docket: ISCAT-005A

**Amendments to the Claims:**

1. (currently amended) A method of producing a vertebrate host mimic for modifying a behavior of arthropods which are parasitic to a vertebrate host, the method comprising the steps of:
  - a. providing ~~a~~ ~~an artificial~~ lipid based media, ~~wherein the lipid based media is selected from the group consisting of lard and jojoba bean oil that is not attractive to arthropods which are parasitic to a vertebrate host;~~
  - b. providing microorganisms, the microorganisms being associated with a skin of the host vertebrate and operative to excrete sub-products which modify the media upon combination with the lipid based media to produce modified lipid based media;
  - c. combining the ~~artificial~~ lipid based media and the microorganisms; and
  - d. collecting the modified lipid based media.

2-9 (cancelled)

10. (original) The method of Claim 1 wherein the host skin associated microorganisms are generally distributed over the skin of the vertebrate host.
11. (original) The method of Claim 10 wherein the host skin associated microorganisms are resident and transient to the skin of the vertebrate host.
12. (original) The method of Claim 1 wherein the host skin associated microorganisms are capable of producing proteases, lipases, or cellulases.
13. (original) The method of Claim 1 wherein the microorganisms are capable of producing enzymes that hydrolyze lipids.
14. (original) The method of Claim 1 wherein the microorganisms are capable of producing enzymes that produce fatty acids.
15. (original) The method of Claim 1 wherein the microorganisms are capable of producing enzymes that produce fatty alcohols.
16. (original) The method of Claim 1 wherein the microorganisms are capable of producing enzymes that produce fatty aldehydes.
17. (original) The method of Claim 1 wherein the microorganisms are capable of producing enzymes that produce hydroxyacids.

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18. (original) The method of Claim 1 further comprising the step of:

e. sterilizing the microorganisms.

19. (previously presented) A vertebrate host mimic produced according to the method of Claim 1.

20. (currently amended) A trap to ensnare arthropods which are parasitic to vertebrate hosts, the trap comprising:

an arthropod ensnaring device, wherein the arthropod ensnaring device is selected from the group consisting of a dome trap, a cylinder trap, a bucket trap, a box omni trap, a vane trap, and a box trap; and

a vertebrate host mimic disposed adjacent the arthropod ensnaring device, the vertebrate host mimic produced according to the steps of:

a. providing a ~~an artificial~~ lipid based media that is ~~not attractive to arthropods which are parasitic to a vertebrate host~~;

b. providing microorganisms, the microorganisms being associated with a skin of the host vertebrate and operative to excrete sub-products which modify the media upon combination with the lipid based media to produce modified media;

c. combining the ~~artificial~~ lipid based media and the microorganisms; and

d. collecting the modified lipid based media.

21. (original) The trap of Claim 20 wherein the vertebrate host mimic is enclosed within the arthropod ensnaring device.

22. (currently amended) A method of producing a vertebrate host mimic for modifying a behavior of arthropods which are parasitic to a vertebrate host, the method comprising the steps of:

e. providing a lipid based media, wherein the lipid based media is selected from the group consisting of lard and jojoba bean oil ~~that is not attractive to arthropods which are parasitic to a vertebrate host~~;

f. providing enzymes, the enzymes being isolated from microorganisms associated with a skin of the host vertebrate and the enzymes being operative

to modify the lipid based media upon combination with the lipid based media to produce modified lipid based media;

- g. combining the lipid based media and the enzymes; and
- h. collecting the modified lipid based media.

23-30 (cancelled)

31. (original) The method of Claim 22 wherein the host skin associated microorganisms are generally distributed over the skin of the vertebrate host.
32. (original) The method of Claim 31 wherein the host skin associated microorganisms are resident and transient to the skin of the vertebrate host.
33. (original) The method of Claim 22 wherein the microorganisms are capable of producing proteases, lipases, or cellulases.
34. (original) The method of Claim 22 wherein the microorganisms are capable of producing enzymes that hydrolyze lipids.
35. (original) The method of Claim 22 wherein the microorganisms are capable of producing enzymes that produce fatty acids.
36. (original) The method of Claim 22 wherein the microorganisms are capable of producing enzymes that produce fatty alcohols.
37. (original) The method of Claim 22 wherein the microorganisms are capable of producing enzymes that produce fatty aldehydes.
38. (original) The method of Claim 22 wherein the microorganisms are capable of producing enzymes that produce hydroxyacids.
39. (original) The method of Claim 22 further comprising the step of:
  - e. sterilizing the microorganisms.
40. (previously presented) A vertebrate host mimic produced according to the method of Claim 22.
41. (currently amended) A trap to ensnare arthropods which are parasitic to vertebrate hosts, the trap comprising:  
an arthropod ensnaring device, wherein the arthropod ensnaring device is selected from the group consisting of a dome trap, a cylinder trap, a bucket trap, a box omni trap, a vane trap, and a box trap; and

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a vertebrate host mimic disposed adjacent the arthropod ensnaring device, the vertebrate host mimic produced according to the steps of:

- a. providing a lipid based media that is not attractive to arthropods which are parasitic to a vertebrate host;
- b. providing enzymes, the enzymes being isolated from microorganisms associated with a skin of the host vertebrate and the enzymes being operative to modify the lipid based media upon combination with the lipid based media to produce modified lipid based media;
- c. combining the lipid based media and the enzymes; and
- d. collecting the modified lipid based media.

42. (original) The trap of Claim 41 wherein the vertebrate host mimic is enclosed within the arthropod ensnaring device.

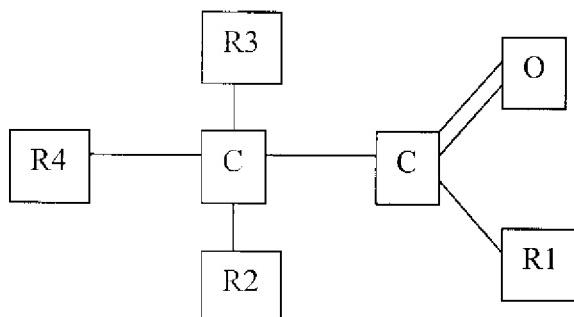
43. (previously presented) A method of producing a vertebrate host mimic for modifying a behavior of arthropods which are parasitic to a vertebrate host, the method comprising the steps of:

providing a single lipid selected from the group consisting of glycerides, sterols, sterol esters, sterol phosphates, sterol precursors, wax, wax esters, wax alcohols, and wax aldehydes;

providing microorganisms, the microorganisms being associated with a skin of the host vertebrate and operative to excrete sub-products which modify the media upon combination with the lipid to produce a modified lipid;

- combining the lipid and the microorganisms; and
- collecting the modified lipid.

44. (previously presented) The method of Claim 43 wherein the lipid is a type of glyceride having the formula:



wherein R1 is selected from the group consisting of Hydroxy, Alkyloxy, Amino, Alkylamino, Dialkylamino, Arylamino, Diaryloxy, Halogen, and Cyano; and

wherein R2, R3, and R4 are selected from the group consisting of Hydrogen, Alkyl, and Aryl.

45. (cancelled)

46. (previously presented) A method of producing a vertebrate host mimic for modifying a behavior of arthropods which are parasitic to a vertebrate host, the method comprising the steps of:

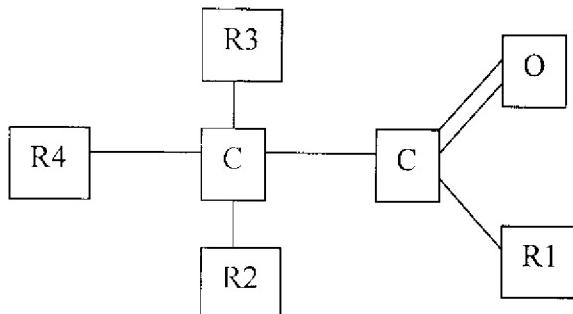
providing a single lipid selected from the group consisting of glycerides, sterols, sterol esters, sterol phosphates, sterol precursors, wax, wax esters, wax alcohols, and wax aldehydes;

providing enzymes, the enzymes being isolated from microorganisms associated with a skin of the host vertebrate and the enzymes being operative to modify the lipid;

combining the lipid and the enzymes; and

collecting the modified lipid.

47. (previously presented) The method of Claim 46 wherein the lipid is a type of glyceride having the formula:



wherein R1 is selected from the group consisting of Hydroxy, Alkyloxy, Amino, Alkylamino, Dialkylamino, Arylamino, Diaryloxy, Halogen, and Cyano; and  
wherein R2, R3, and R4 are selected from the group consisting of Hydrogen, Alkyl, and Aryl.

48. (cancelled)
49. (New) The trap of Claim 20 wherein the lipid based media is selected from the group consisting of lard and jojoba bean oil.
50. (New) The trap of Claim 41 wherein the lipid based media is selected from the group consisting of lard and jojoba bean oil.
51. (New) A method of capturing parasitic arthropods, the method comprising:
  - a. providing a trap;
  - b. providing a modified lipid based media adjacent to the trap, wherein the modified lipid based media is produced according to the steps:
    - i. providing a lipid based media;
    - ii. providing microorganisms, the microorganisms being associated with a skin of a host vertebrate and operative to excrete sub-products which modify the media upon combination with the lipid based media to produce modified media;
    - iii. combining the lipid based media and the microorganisms; and
    - iv. collecting the modified lipid based media;
  - c. ensnaring at least one arthropod within the trap.

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52. (New) The method of Claim 51 wherein the trap is selected from the group consisting of a dome trap, a cylinder trap, a bucket trap, a box omni trap, a vane trap, and a box trap.
53. (New) The method of Claim 51 wherein the lipid based media is selected from the group consisting of lard and jojoba bean oil.